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(Incorporating Amendment No. 1)

( Superseding IS : 6247 - 1971 ) ( Reaffirmed 1996 )

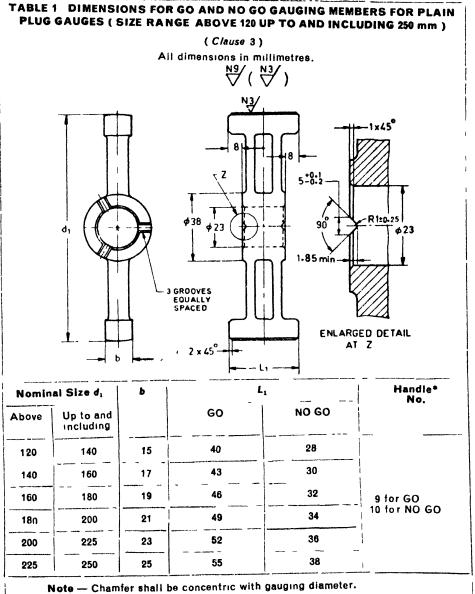
Indian Standard

# SPECIFICATION FOR GAUGING MEMBERS FOR PLAIN PLUG GAUGES GO AND NO GO MEMBERS

( SIZE RANGE ABOVE 120 UP TO AND INCLUDING 250 mm )

(First Revision)

- 1. Scope Covers requirements for gauging members for plain plug gauges for GO and NO GO members in the size range above 120 up to and including 250 mm. These plain plug gauges may also be used to check the minor diameter of internal threads when made according to IS: 4218 ( Parts I to VI ) ' ISO metric screw threads '.
- Material Shall be as prescribed in IS: 7018 (Part I)-1973 'Technical supply conditions for gauges: Part I General'.
- 3. Dimensions Dimensions and tolerances for GO and NO GO members for plain plug gauges shall be as specified in Table 1.



•IS:5388-1983 'Hexagon handles for plug gauges plain and threaded (second revision)'.

Adopted 25 August 1980

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**4. Gauging Dimensions** — Gauging dimensions for plain plug gauges shall conform to IS: 3455-1971 'Gauging practice for plain workpieces (*first revision*) 'and IS: 2334-1975 'Gauging practice for ISO metric screw threads (*first revision*) 'for measuring plain workpieces and minor diameter of internal threads respectively.

#### 5. Designation

5.1 Gauging members for plain plug gauges shall be designated by nominal size of the hole and the tolerance class according to IS: 919 (Part I)-1963 'Recommendations for limits and fits for engineering: Part I General engineering'.

#### Example.

A GO or NO GO gauging member for plain plug gauge to check a hole of nominal size 130 mm and tolerance class H8 shall be designated as.

GO Gauging Member 130 H8 IS: 6246 NO GO Gauging Member 130 H8 IS: 6246

5.2 If tolerances other than according to IS: 919 (Part I)-1963 are required, gauging members for plain plug gauges shall be designated by the nominal size of the hole and its limits.

#### Example:

A GO or NO GO gauging member for plain plug gauge to check a hole of nominal size 130 mm and with a tolerance of  $\pm 0.050$  shall be designed as:

GO Gauging Member 130  $^{+0.050}_{0}$  IS : 6246 NO GO Gauging Member 130  $^{+0.050}_{0}$  IS : 6246

**5.3** Gauging members for checking the minor diameter of internal ISO metric screw threads shall be designated by nominal size of the threads and tolerance class according to IS: 4218-1976 'ISO metric screw threads'.

#### Example

GO or NO GO gauging member for plain plug gauge to check the minor diameter of internal ISO metric screw thread size M150 and tolerance class 6H on the minor diameter shall be designated as:

GO Gauging Member M150 6H IS: 6246 NO GO Gauging Member M150 6H IS: 6246

- 6. General Requirements Other requirements for gauging members for plain plug gauges not covered in this standard shall conform to IS: 7018 ( Part I )-1973
- 7. Marking Shall be in conformity with IS: 7018 ( Part I )-1973.
- 7.1 Certification Marking Details available with the Bureau of Indian Standards.

### EXPLANATORY NOTE

This standard was originally published in 1971. At the time of reviewing the specification, the Committee responsible for its preparation felt it necessary to rationalize it on the basis of ISO: 3670-1979 'Blanks for plug gauges and handles (taper lock and trilock) and ring gauges-design and general dimension'. The main deviations from the earlier standards are:

- i) Gauging members for plain plug gauges GO and NO GO members (size range above 120 up to 250 mm) have been combined to cover the requirements of GO and NO GO members in one specification, IS: 6247-1971 'Gauging members for plain plug gauges NO GO member (size range 100 to 250 mm)' stands withdrawn.
- II) Diameter range has been changed to 120 to 250 mm from the earlier 100 to 250 mm.

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- iii) Dimensions other than for measuring surface and also the trilock groove details have been modified.
- iv) Alternate-design given in the earlier version has been deleted.
- v) Surface finish symbols have been modified.

Size range from one up to and including 40 mm and above 40 and up to and including 120 mm have been covered in separate specifications, namely, IS: 6137 'Gauging members for plain plug gauges GO and NO GO member (size range 1 to 40 mm)' and IS: 6244 'Gauging members for plain plug gauges GO and NO GO members (size range 40 to 120 mm)' respectively.